Meeting Summary
Leon River TMDL Stakeholder Group

August 26, 2004

STAKEHOLDERS PRESENT: Anthony Daniel, Hall DeBusk, Kyle Headley, Richard Eyster, and Neil Walter.

OTHERS PRESENT WHO REQUESTED TO BECOME STAKEHOLDERS:
Gary Henry (BRA), T.J. Helton (TSSWCB), Lee Munz (TSSWCB), Jonathan Graham (City of Temple), Tommy Elliott (Comanche Farm Bureau), and Cyndi Patton Guinn (landowner).

STAKEHOLDERS ABSENT: James Abbott, Judge Jon Burrows, Richard Cortese, John Cowan, Bill Dugas, Robert Fleming, Randy Holly, Norman Mullin, Clarence Richardson, Leroy Schiller, Buddy Teague, and Kevin Wagner.

SUPPORT TEAM PRESENT: Kerry Niemann (TCEQ), James Miertschin (James Miertschin & Associates), and Timery DeBoer (Hicks & Company).

OTHERS PRESENT: Kiefer Marshall, Jr., Danny Dunn, and Rodney Adams.

WELCOME AND INTRODUCTIONS:
Kerry Niemann opened the meeting at approximately 12:05 PM and introduced himself, James Miertschin, and Timery DeBoer. Mr. Niemann requested that those present fill out a questionnaire provided by TCEQ that requested feedback on the TMDL process. Mr. Niemann also mentioned that all previous meeting summaries and other project-specific information can be accessed via the TCEQ website.

PRESENTATION SUMMARY:
James Miertschin gave the presentation. (*NOTE: Questions and Answers are inserted in italics for clarification.*)

The study is being conducted on Segment 1221- Leon River below Proctor Lake. The segment is defined as beginning 100 meters upstream of FM 236 in Coryell County to Proctor Dam in Comanche County. The watershed encompasses portions of Comanche, Hamilton, and Coryell Counties; including the cities of Dublin, Comanche, and Gatesville.

This TMDL study is being conducted in order to determine the maximum amount of the target pollutant (*E. coli* bacteria) that Study Segment 1221 can take and still meet water quality standards set by the TCEQ (geometric mean of < 126 CFU/100ml; maximum < 394 CFU/100ml). The ultimate goal is to restore and/or maintain the beneficial uses of the waterbody.

TMDL development includes the following steps:

- Segment listed on the federal Clean Water Act Section 303(d) list of impaired waters.
- Pollutant is identified (*E. coli* bacteria)
- TMDL project initiated
- Data collection
- Data assessment
- TMDL allocation- identification of a quantifiable water quality target for each constituent
- Develop a TMDL Implementation Plan
- Draft TMDL Report
- TCEQ review / Public comment
- TCEQ approval / EPA approval

Stakeholder involvement is very important to the TMDL development process.

Project history was reviewed:

1. TCEQ listed the Leon River on the Section 303(d) lists in 2000 and 2002 due to pathogens (fecal coliform as an indicator)
2. 2000 TCEQ Assessment indicated that a 125-mile stretch of the segment was "Not Supporting" for Contact Recreational Use (based on Station 11926 in Gatesville, Station 11932 at US 281 north of Hamilton, and Station 11933 at CR east of Lamkin).
3. 2002 TCEQ Assessment indicated that a 30-mile reach was "Not Supporting" (Station 11932 at US 281 north of Hamilton); and a 14-mile reach was "Not Supporting" (Station 15769 at FM 1702 near Gustine).
4. JMA 2002 Assessment indicated that a 25-mile reach was "Not Supporting" (Station 15769 at FM 1702 near Gustine); and another 25-mile reach was "Not Supporting" (Station 11932 at US 281 north of Hamilton).

Q: Did you take water samples at peak flows or during periods of low flow?
A: Samples were collected during storms (Storm Events) and during normal conditions (Baseflow Events).

Q: What is non-contact recreation?
A: Activities including fishing, wading, etc.

Fecal coliform data from 1973-1979 and from 1990-2001 indicate that fecal coliform levels vary widely, but are generally high. No increasing or decreasing trends are indicated in the data. Fecal coliform levels are not correlated with water flow.

TMDL Monitoring Plan Details:
Water samples are collected during storm events and at baseline levels. Sampling stations were located on the Leon River, several tributaries, and several wastewater treatment plants (WWTP). Field measurements include time of travel (how quickly

water is flowing), field parameters (pH, conductivity, temperature, dissolved oxygen), and bacteria kinetics (measurement of the die-off rate of *E. coli* bacteria).
Q: Why does the water in Bosque County taste bad?
A: This study only relates to the Leon River. TCEQ is currently working on a separate project in the Bosque area.

Dr. Miertschin showed several photos of water sampling stations and methods.

Results from Storm Event #1 (June 5,2004)

	Number of stations	No. of stations with geometric means > 126 CFU/100ml	No. of stations with maximums > 396 CFU/100ml
Main Stem	4	3	4
Tributaries	5	4	4
WWTPs	5	0	0

Q: Please explain the horizontal, dotted lines.
A: The lines represent TCEQ's criteria for E. coli. Values above those lines indicate that the criterion has been exceeded.

Results from Storm Event #2 (June 10,2004)

	Number of stations	No. of stations with geometric means > 126 CFU/100ml	No. of stations with maximums > 396 CFU/100ml
Main Stem	4	4	4
Tributaries	4	4	4
WWTPs	6	1	2

Q: In one sample there was 30,000 CFU/100ml?
A: Yes, the graphic is correct.

Q: How much rain was involved in this storm event?
A: About 1 inch, but there was another storm a few days prior so the soil would have been wet and runoff likely increased.

Results from Baseflow Event #2 (August 9,2004)

	Number of stations	No. of stations with geometric means > 126 CFU/100ml	No. of stations with maximums > 396 CFU/100ml
Main Stem	7	6	1
Tributaries	4	2	1
WWTPs	6	1	0

Next Phase:

- Data Compilation
- Modeling
- TMDL Assessment
- Stakeholder Participation

Questions and Comments:

Q: What is the timeline for completion of the TMDL? Can the modeling wait until the BST results are known?
A: The TMDL is scheduled to be completed no earlier than August 2005. The availability of data will dictate when the model is completed.

Comment: One good tool may be to look at stations along the segment that got a lot of rain and compare those results to those with little rain.
Response: That would provide good data, but we don't have that kind of detail in the rain data.

Q: Will this data be shared with others?
A: So far data have been collected and compiled. As the project moves into the modeling phase, TCEQ and JMA will coordinate with stakeholders. TCEQ works with several partners to get data used in assessments. These partners meet annually to coordinate and thereby avoid duplicating each other's efforts.

Q: Are you testing for anything other than E. coli?
A: No, a TMDL only covers one pollutant.

Q: I attended a water quality meeting in Bell County last year involving a BRA study where trends were shown. Do these data indicate any trends?
A: Dr. Miertschin indicated that he had in fact authored that study and made that presentation. The data indicate several water quality concerns, but no increasing or decreasing trends in E. coli concentrations. This TMDL could be used in the future to model other pollutants, such as nutrients.

Q: Are the measured E. coli levels a concern for potable water?
A: No, water treatment plants are designed to deal with these issues by providing disinfection processes.

Q: Are you concerned about the independence of data between the Farm Bureau study and this TMDL project?
A: No, the Farm Bureau study is being conducted by a group including BRA, the City of Waco, Soil Board, and A&M labs. The results will be independent and will be shared.

Q: Are you keeping the county health departments involved? Septic tanks may contribute to the bacteria problem.
A: We will get specific data on septic tanks during the modeling phase.

Q: Is there a TCEQ database of septic tank locations?
A: Yes, but load from septic tanks is difficult to assess and tanks installed prior to 1997 did not require the current approval and inspection process. More of a concern right now is mobile home parks.

Q: Is the concentration of E. coli increasing in the Leon River?
A: The data do not show an increasing or decreasing trend; just high levels.

Q: How old is your data?
A: We have data from as far back as the late 1970s.

Comment: The Leon River seems "blessed and cursed" with high bacteria levels, but also high numbers of wildlife.
Response: We really appreciate hearing stakeholder opinions.

The meeting adjourned at approximately 1:05 PM. The next meeting will be scheduled in August 2005.